

THE
FIRST REPORT
OF THE
LONDON MISSIONARY SOCIETY'S
CHINESE HOSPITAL,

AT
PEKING.

FROM OCTOBER 1ST 1861, TO DECEMBER 31ST 1862.

W. LOCKHART, F. R. C. S.

1862.

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REPORT OF THE LONDON MISSIONARY SOCIETY'S
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FROM OCTOBER 1861, TO DECEMBER 1862, Inclusive.

I arrived in Peking on 13th September, 1861, and was Mr. Bruce's guest at the British Legation till 23rd October, when I was enabled to occupy a house of my own, which was kindly obtained for me by Mr. Bruce; and I take this opportunity of expressing my hearty thanks to him, for all he did in getting me the house at once, and thus enabling me to reside at Peking.

A few patients came to me, while I was living in the Legation, but as soon as I went into my house, and it was known that I would attend to any sick Chinese that applied to me, patients began to come in numbers for relief. At first, two or three persons a day came; then a dozen or more, and afterwards twenty or thirty.

Among the first cases that were seen, were a woman with an abscess deep in the palm of the hand, and a man with thecal abscess of the forefinger. They submitted at once to the deep incisions needed for their relief, and were very thankful for the benefit they thus received.

At this time, I had only the small stock of medicines that I had brought overland with me, and some additional articles procured at Shanghae; but in November the new supply of medicines and various articles arrived, and I was thus in a better position to supply the wants of the applicants, who began to be very numerous. Among the early cases, there were a few fortunate ones, which no doubt had an influence in increasing the number of patients. A man who had necrosis of the right ramus of the lower jaw, had a large portion of the dead bone removed. Subsequently the re-

maining portion also became detached, and was taken away to the man's great relief. A man who had closure of the lids of one eye for 20 years, was told that the eye was probably safe, and in good order. A slight operation was recommended, and an incision made in the line of the original opening, when a round eye was exposed, and the man went off exclaiming that he had regained an eye. A very large polypus of the nostril was removed in another case; and a tumour in the gum of the upper jaw, which caused great deformity to a man's face was operated on and removed.

In consequence of these and similar cases, the number of patients rapidly increased, and great numbers attended every day. Persons of all classes, officers of every rank and degree came, and sent their wives, mothers, children, and other relations. Merchants and shop-keepers, working-people and villagers, together with numerous beggars assembled at the hospital. Ladies and respectable women also were present in large numbers, and it was surprising to see the readiness, with which they both came for relief, and brought their children who were suffering from various diseases.

The Tartar women came to me very readily indeed. It is probably the Tartar element among the people here, that makes them more free with foreigners than the Chinese are at other places. There is less of Oriental seclusion among the Tartars and other Northern races, than is found among the native Chinese, and I think it not unlikely that we shall find, we can have more fellowship with the Tartar races, both rulers and people, than with the Chinese themselves. The influence of the Tartars is also shown in another instance very remarkably. The Tartar women never have their feet bound or compressed, as the Chinese women have had their since A. D. 950; but in Peking, great numbers of the Chinese women are seen with the feet of their natural size like the Tartar women; and, even in the most respectable families both of officers and civilians, the female children are not subjected to this painful proceeding. In Peking, it is not necessary to follow this foolish fashion, but in the other cities of the province, as in all other parts of the empire, the women's feet are compressed into the usual small size.

All classes of the people and officers of government of every rank have applied to the hospital. An ex-guardian of the heir-apparent,

and President of the Board of Revenue came to me for the treatment of paralysis. I visited him afterwards at his own house, and attended some members of his family, including one or two of his daughters. The President of the Board of Punishment sent his son, to be treated for head-ache of a chronic character. Officials of the various other Boards;—members of the Censorate,—members of the Han-lin-yuen,—members of the Imperial family,—eunuchs of the Palace,—civil and military officers of red, blue, white and gold buttons,—officers and privates of the regiments of the banner-men,—policemen of all classes,—writers and clerks in the public offices have all presented themselves as patients.

Chinese, Manchoos, Mongols, Thibetians, Coreans and Mohamédans, natives of the capital and from Kashgar, and other regions to the West have been attended to.

The number of patients attended to during the 14½ months, that the hospital and dispensary have been open, is 22,144 individual cases. I do not propose to give the details of the diseases that presented themselves, but rather to make such general remarks as may be requisite, on the various classes of diseases, as suggested by my case book, and the detailed register of the cases themselves.

In September and October of 1861, there was an epidemic of Jaundice among the people, and 370 cases of this affection applied to the hospital. It was generally slight, and readily yielded to treatment. Some of the cases were accompanied by much pain and fever, and in several of these anasarca supervened. The treatment consisted of purgatives of one kind or another, according to circumstances, and occasionally a blister over the liver. The people seemed to appreciate the method of cure adopted, as so many of them came for relief. This is an unusual disease to appear as an epidemic. The cause of it is, probably, the sudden change from hot to cold weather. The hot days and cold nights of the autumn, and also the great difference of the temperature on calm and on windy days, cause such changes in the circulation of the liver, that it becomes inactive after the excessive stimulation of the heat. At the time of the change from hot to cold weather, perspiration is suddenly checked, the blood is thrown from the surface of the body upon the internal organs, especially the liver, and this enlargement of its vessels makes it inactive for a time, until it is

enabled to adapt itself to the circumstances, and resume its usual or accustomed functions. The epidemic prevailed also to a great extent in the provinces of Shan-se and Shen-si. The inhabitants say that jaundice is frequently prevalent in the autumn, but there have only been a few cases observed this autumn of 1862, and since the cholera left the neighbourhood, there has been no prevalent epidemic at all.

Small-pox.—In walking about the streets of Peking, it is very remarkable how large a number of the people are seen to be marked by small-pox, showing that this disease is very common, and on enquiry such is found to be the case. At times, this disease prevails as an epidemic. Every year there are many cases in the spring, and many children die, but occasionally it spreads extensively among the inhabitants and commits great ravages. The system of inoculation is followed here as in other parts of China, and the practice usually adopted is to break up a variolous crust or scab, and place it in the nostril of a child, which generally thus takes the small-pox mildly, but the children thus treated sometimes take the confluent form of the disease, by which sight and even life is lost. It is true that the disease taken by inoculation, is generally milder than when it is taken spontaneously, but the great objection to inoculation is, that the disease itself is thus maintained among the community, and every case is a focus of infection; whereas in vaccination the tendency is to get rid of small-pox altogether, serious accidents do not occur from it, and there is no liability to take on a fatal form of disease.

Immediately after the commencement of the hospital, vaccine lymph was procured through the kindness of Dr. Kerr, Medical Missionary at Canton, and many children have been vaccinated. Numerous ladies, both Tartar and Chinese, have brought their children to be vaccinated. Frequently, two or three families came together, the mothers-in-law accompanying the young wives with their nurses and children, all dressed up in their best attire, and making the surgery look for the time like a flower-garden.

Vaccination is regularly carried on, as largely as possible, at the hospital. Since this plan was introduced, advertisements have been posted in many of the streets of the city, stating that such and such persons (natives) practise vaccination. Their lymph has all been

procured from the hospital, without acknowledgement. These native surgeons send a child to be vaccinated here, and when the lymph is ready for use, they do not allow the child to be brought for inspection, but use the lymph themselves. I offered to teach some of them, and give them directions for keeping the lymph pure and free from deterioration, by showing them the signs of the true vaccine, but they prefer to play me the above trick, and act in this surreptitious manner, than acknowledge an obligation to a foreigner.

Cough, hæmoptysis and phthisis prevail largely in this district of the country. As stated in another part of this report, the soil in this region is sandy, and there is little marsh or damp ground, consequently ague is seldom met with, and there is less dysentery here than in the South of China. As a general rule, where ague prevails diseases of the chest are rare, but when as in this Northern region, ague is seldom seen, various diseases of the lungs are found to prevail. Of course in cold countries, disease of the lungs is more common than in warm or hot countries, where the liver and bowels are chiefly the seats of disease; yet even in a hot region, as far as I have been able to ascertain, the people of those parts where ague prevails, are less liable to diseases of the chest than those who live in a district where ague is less common.

Bronchitis, pneumonia, asthma, chronic cough, hæmoptysis and phthisis, are very frequently seen at the hospital. During the winter months, large numbers of patients suffering from this class of diseases applied for relief. Many patients came into the surgery last winter, affected with hæmoptysis, and it was astonishing to see the amount of blood that some of them coughed up. On various occasions, three or four persons have been in the place together, thus severely affected, and coughing up large quantities of blood. Congestion of the lungs was also frequently seen during the winter months especially in young children. Phthisis is very common, many young women are constantly seen in various stages of this malady, and great numbers of persons die annually from phthisis in this city and its neighbourhood.

Hooping-cough is frequently seen among the children. Croup is very common and very fatal, especially during and after gales of wind in winter. Many children also die of diphtheria, which has been seen in all its stages.

Cholera is said to affect the people to some extent every summer, but this year there was a very severe visitation of epidemic cholera, which lasted for about two months. It was first heard of at Taku, where many Chinese in the village died, and some of the European soldiers in the garrison. It then visited Tëentsin, where it was very virulent and exceedingly fatal, then various towns on the river, till it came to T'ung-chow, and immediately afterwards, cases of cholera were seen in the streets of this city,—people dying where they had been seized, who were not able to reach their homes, also many beggars died in the streets, having no home to go to. The disease began in the Chinese city which is exceedingly filthy, and great numbers died there. It then made its appearance in the Tartar city, and gradually passed through it from South to North; and, finally, went in the direction of the small river stream to Hae-tëen and the villages in the western hills. At one time, the street in which the hospital is situated was much affected, and several persons died. The servants and people in the hospital suffered very much for a few days. Almost all of them had the disease more or less severely, some of them had it in a very virulent form, but happily no one died. Almost every morning the bodies of one or two persons were seen in the streets, or in the dry bed of the canal, who had lain down and died in the night. These bodies were generally removed at once by the policemen of the district, who brought a coffin and had the corpse carried out of the city to one of the free burial grounds. The officer of the quarter levies in these cases a fine in the street where a body is found, so that it is the interest of the householders to fee the policeman to remove the bodies at once, before his chief becomes aware of the circumstance, and thus the fine cannot be levied. It is better to fee the police, than be fined by the officer. At all events, the result of this imposition was very satisfactory. I feared the bodies of the dead would be left exposed in the streets, but I never found this to be the case. They were all speedily removed, and carried outside the walls of the city. The Chinese rely chiefly on acupuncturè in the hands and arms, and especially at the upper and back part of the leg just below the knee, as a means of cure. They also largely use small pills composed of Realgar or Sulphuret of arsenic, Cinnabar, Bezoar and liquorice root

in frequent small doses, but the expectations of cure were not fulfilled. Great numbers died. At first, almost all who were seized died, afterwards, however, the disease appeared to be less virulent, and many of those attacked gradually recovered. The Chinese government opened rooms in various parts of the city, where large quantities of the above pills were given to all applicants with printed directions for their use, and these establishments were kept open, till the disease entirely ceased.

Among the patients treated in the hospital, and in their own houses, astringents and opium were largely given, in the first instance, with frequent small doses of calomel,—mustard poultices and turpentine frictions being used externally at the same time, and hot water bottles applied to the feet and legs. Stimulants were also given, and afterwards carbonate of soda and chlorate of potash, I believe with much success; at all events the patients got well during, if not because of the treatment.

A man is now attending the hospital, who had cholera in the summer, for which acupuncture was used by his friends; the result was violent erysipelas, ending in excessive sloughs of the forearm from the elbow to the wrist, and it will be a long time before the exposed surface is entirely healed. As the result of careful investigation from official sources of information, the amount of the deaths from cholera alone during the two months of its visitation, was 15,000 out of the two cities; and if, as is supposed, the population of these two cities of Peking amounts to 1,500,000, the deaths were thus 1 per cent. I had reason to believe that the amount was above 20,000, but the smaller number is stated to be correct, and the result of carefully counting the coffins as they were carried through the gates, by the gate-keepers, who are the subordinates of the Kew-mun Te-tūn or governor. During these months of the summer, July and August, the number of funerals in the streets was very great, and frequently 8 or 10 coffins would be seen passing from one of the city gates at the same time. On one occasion, 20 coffins were thus counted on one road only.

When cholera had almost entirely left the Tartar city, many fatal cases still occurred in the Chinese city, near the great gates leading into the former. Just at these points there is a dense population, and according to the usual habit of the Chinese, all the offal and

filth from their houses was thrown over the bridges outside the gates into the moat or city ditch. The stench at these bridges in the summer was frightful, and the consequence was that cholera remained about the houses and shops near the bridges for a long time. When speaking to the Chinese about the abatement of the pestilence, they would say, yes, it has almost all gone, except outside these gates leading into the Chinese city.

Great numbers of the people are affected by goitre, chiefly the women. In fact, it is very rarely that a man is seen to be affected, but many of the women have their necks thus enlarged, and sometimes the goitre is very large and occasions much distress to the sufferers. The women in the villages also suffer much more than those in the city do. A visit can hardly be made to any village, without seeing some of the women who have this disease. It may be stated, that the well water which is exclusively used, has much lime in it, causing an extensive deposit in the kettles and other vessels for boiling water; but all the persons thus affected are inhabitants of the great plain of Peking, none are dwellers on hills or mountains.

Opium-smoking prevails to a great extent among the people, but not to the same extent as in the South of China. Many persons have applied for relief from this evil habit, the chief part of whom have been enabled to throw off the practice of opium-smoking in course of a few weeks, and I believe have not resumed it. But here as elsewhere, the smokers of the drug have frequently not sufficient resolution to persevere in the restriction imposed on them, and fall back into the use of the pipe, saying that they are afraid they should die were they to give it up, though they are assured, that after many years residence in China, I have never known a single person dying from that cause, but that all who do leave it off entirely are at once much benefited.

About one-half of the opium used in Peking is from India, the rest is native grown;—part comes from Sze-chuen, and the valley of the Yang-tsze-kiang, where it is produced largely; and part from Mongolia, where immense tracts of land are devoted to the cultivation of the poppy. Much opium is manufactured there for the use of the Mongols, who use their native drug exclusively, and the surplus is sent for sale to the North of China.

The number of cases of paralysis of various kinds has been very surprising, chiefly atonic paralysis;—in many cases, being the result of excessive study, and of endeavouring to commit to memory the books of the classics; and in some, the result of extreme dissipation. Other cases were clearly the result of effusion of serum, or the extravasation of blood on or into the brain, as in apoplexy. From all that could be ascertained, it would appear that disease of the brain and paralysis in its various forms prevail to a great extent in this city. I am satisfied that one cause of cerebral affections among the Chinese in the North, is the practice of living and sleeping in rooms heated by stoves, in which anthracite coal is burned. These stoves have no chimney, and the coal being smokeless leads the people to suppose that nothing injurious passes from the fire, but of course a large amount of carbonic acid gas is generated and injuriously affects those exposed to it, causing severe head-ache, stupefaction and fever.

Many persons have been brought to me semi-comatose, who in the cold weather had lighted the stove, and then gone to bed, but were afterwards found by their friends to be insensible. Such a state often repeated, must give rise to cerebral disease sooner or later, and I am sure it does so in many instances.

Amaurosis is also very common, more so than is at all usual, probably, as above stated, the consequence of unremitting application to reading, and also of dissipation and excess. Many of the Buddhist and other priests are affected by this malady.

Insanity.—Many cases of insanity and idiocy have been seen. The chief part of these cases were those, in which the afflicted persons were quiet and could easily be controlled. Occasionally a case of violent dementia was seen.

A woman was one day brought to the hospital, who was very unruly and violent, and appeared to be suffering much from excitement of the brain. Some medicine was given to her, which at first she refused to take, but afterwards swallowed it quietly. She was a young, strong, well-nourished woman. She attended a few times and after the treatment she received, became much quieter. After the lapse of a few days, I saw her standing in the surgery with her attendants among the other female patients, and when I told her attendant to bring her to me, the woman herself

raised her hands, which were both almost black, and in a state of mortification, with large vesications on them, the wrists being much lacerated, and the forearm smaller and dark coloured. It appeared on inquiry, that she had been very violent at home during one of her paroxysms, and been tightly bound round the wrists by cords, which had been allowed to remain for some days, when her friends became alarmed, and sent her to me. All that could be done was at once attended to. It was surprising that she could walk or had strength to move, her hand being in such a state, but she seemed indifferent to the condition she was in, and almost insensible to pain, as insane persons often are. I did not see her again, and have no doubt that she died soon afterwards, from the spreading of the mortification up her arms.

The case of the insane is very sad in such a country as this. There are no asylums of any kind, and to restrain these unfortunates, they are usually bound and then much neglected,—in fact, their death is urgently desired, and many die from the hard and cruel treatment to which they are subjected.

Many epileptic cases have been seen. Several deaf mutes have from time to time been brought to the hospital

Scrofula in all its stages is frequently seen. Glandular swellings of the neck, suppuration of the glands, ulcers of various parts, disease of the joints, especially of the elbow, wrist, hip and knee, and curvature of the spine from disease of the vertebræ, indeed all the Protean forms of this very distressing malady, culminating in phthisis.

Several cases of sloughing of the cheek and lips,—a form of cancrum oris have been seen, in ill fed, badly nourished children. In one case, that of a little boy 8 years old, the sloughing resulted from necrosis of half the lower jaw, much of the dead bone came away, and the cavity began to fill up with granulations, but eventually the sloughing began again, and the boy died, worn out by the progress of the disease.

Cases of abscess present themselves constantly; severe thecal abscesses often involving the loss of the tendons, and bones of the fingers are very frequent. Many cases of carbuncle have been attended to, sometimes three or four cases of carbuncle of unusual size would come in one day for treatment. I have never before seen so many or such large carbuncles, as I have seen here, some of them being 6, 8 or 10 inches in diameter. The native mode of treatment of carbuncle, is to cover it with a large piece of native stimulating adhesive plaster, which

adhering to the skin all round, retains the discharge, and causes the pns to burrow through the flesh in all directions, sadly aggravating the already sufficiently painful malady. The removal of this plaster, washing the surface, and taking away the dead tissue in the centre of the carbuncle at once gives much relief.

The plan that is adopted at the hospital appears to have become known and approved of, and to be the cause of so many cases of this affection presenting themselves.

Cancer is very common here, affecting the tongue and submaxillary glands in men, and the breast in women. Some very severe cases have been seen, but they were so far advanced that nothing could be done for them. A respectable woman came some months ago, on account of a large painful tumour of the breast, apparently non-malignant. She was told that nothing could be done for her, except the removal of the tumour by operation. She at once consented to this, and begged to be allowed to come in immediately, and have the operation performed, and a few days afterwards, the tumour was removed under chloroform. She soon got well and returned home. Since that time she has again applied, and two or three smaller tumours have been taken from the same breast. She and her husband have been very thankful for the relief afforded, and put up in the hospital a tablet expressive of their thanks for all that was done for her.

Several tablets have been put up in the hospital by patients, who have been operated on for various diseases, and by others for medical treatment, in token of their gratitude. Two were put up by a number of opium smokers, who had been enabled to throw off their bondage to the pipe. A short time ago, fifty of the patients put up a tablet with the inscription,—“To the English surgeon who heals the people,” “the subscribed return their thanks;”—then follows the list of the names. These tablets are generally carried about the city with a band of music, and a number of banners in procession, before they are brought to the hospital.

Accidents—Several cases of fractures of the bones of the upper and lower extremities have been treated, and one case of compound fracture of the tibia.

A man was brought in one day, who while proving a musket barrel he had just made, had his hand severely injured by the bursting of the barrel, the thumb was almost torn off, the fingers were lacerated, and portions of them shot away. It was at first

thought that the hand must be removed, but finally an effort was made to save it, and by water dressing and other treatment, the hand was saved. Fragments of iron were taken away from the palm of the hand at different times, the hand was much crippled, but the man can use the thumb and middle finger readily as a kind of nippers, and thus is able to work at his trade.

One of the bannermen while on parade had his matchlock burst in his hand, which tore away the thumb and its metacarpal bone, the palm was also much lacerated. He had been treated for some time by a native surgeon, and the hand was in a very filthy, swollen and painful state, but by keeping the parts clean, and applying water dressings &c. he gradually got well, and has at all events four fingers to grasp objects with, though he has no thumb.

A man was brought to me, who had quarrelled with a friend, and they had fought with knives or choppers. The patient had received a very severe cut on the hand, almost separating the thumb down to the wrist joint. Much inflammation and suppuration ensued in this case, and it was a long time before he recovered.

A man walked into the surgery one day, who had a wound of the abdomen, through which a large piece of omentum had protruded. He had stabbed himself because his master in a shop had blamed him, for some irregularity in his accounts. The wound had been inflicted some days before he came to me, so that the omentum could not be returned. In a few days, it began to contract, and I hoped to remove the protrusion in a little time. He would not become an in-patient, and as he ceased to attend before he was cured, it was not known what became of him.

The son of a bannerman was severely burned from an explosion of gunpowder. The chest, back and left arm had received the most injury, and it was feared that the boy would die from the excessive suppuration or from dysentery, but his strength was sustained by tonics and opium, and he eventually recovered, but the arm was hopelessly stiffened and almost useless.

An old lady came to me for rheumatic pains in her limbs. One day after her visit, as she was returning home in her cart, the driver trying to turn a corner and cross a bridge, miscalculated the distance, and the cart with the old lady in it, fell over the edge of the bridge into the canal. She fell a considerable distance,

and received a fracture through the condyles of the femur. I attended her for some time at her own house, she eventually recovered, but with a stiff knee joint.

Frost bites.—Several cases of severe frost bites were seen during the winter and spring, where the foot and in some cases half the leg had dropped off. One boy had lost half of one foot and the whole of the other, and the bones of the leg were bare to midway between the ankle and knee. The bones separated eventually, and the surfaces and sore almost healed. The boy was in so weak a state, that amputation could not be performed, but by supporting his strength with good food, he has gradually recovered.

Several cases have been seen, where men sitting near braziers of burning charcoal, or in a room where they had an anthracite chimneyless stove, became insensible, and falling over the fire been very severely burned; in one case, the left foot had been burned, so that it separated above the ankle joint.

Another man had the calf of one leg burned away, but he recovered after much suffering. Many limbs, and many lives are thus sacrificed every winter. Persons not only become asphyxiated who eventually recover, but those who are not speedily found and at once roused, are suffocated by the carbonic acid gas, evolved from the burning coal.

A few days ago a man came to me, who had a large space on his hip burned away, as large as a dinner plate. On being asked the cause of this, he said he was sleeping on a kang or native stove-bed place, and that while asleep the stove became too hot and burned him. No doubt, he had become partly insensible from the fumes of the burning coal, and was only roused by the severe burn that was inflicted upon him. The fire must have been very hot, for the burning extended deep into the flesh. This man is still under treatment.

A boy came one day who had the whole of his scalp distended with blood, which made his head very large. He said he had received no blow or other injury on the head. It appeared as if the swelling was extravasated blood under the scalp, the result of a blow, yet it was uncertain whether the fluid was blood or pus, for the people here have occasionally most extraordinary accumulations of pus under the skin. However on puncturing the scalp, a large

quantity of fluid blood passed out. Care was taken to prevent the entrance of air, a bandage was applied tightly over the whole of the head, so as to keep up a firm and equal pressure. A few days afterwards, some more blood was allowed to escape, and by the continuance of the tight bandage, the scalp settled down on the bone very firmly, and all the swelling disappeared.

Diseases of the eyes.—Many cases of eye disease have been attended to. Great numbers of persons suffer from this class of disease here, as in other parts of the Empire, for there being little relief afforded by native modes of treatment, there is a great accumulation of such cases. About a third of the cases attended to during the year have been those, in which the eyes have been more or less diseased. Catarrhal ophthalmia is very common, owing to the sudden changes of temperature. Many children are affected by purulent ophthalmia, and of these many lose their sight in one or both eyes.

Conjunctivitis, granular lids, leucoma, pannus, ulcers of the cornea, conical cornea, staphyloma, trichiasis, pterygium, &c. &c. are those most usually met with. The frequency of Amaurosis has been spoken of in another place. Many cases of cataract have also been attended to. Of these, a large proportion were in an unfit state for operation, apparently owing to attacks of inflammation of the globe, but several cases were successfully operated on by extraction, and the patients returned home with restored vision. Several young persons have also been operated on, by breaking up the lens, enlarging the opening made in the edge of the cornea, and discharging the softened lens through it. Tapping the anterior chamber, to discharge the pus in cases of hypopion, removal of staphyloma and pterygium, operating for trichiasis and entropium, enlarging the punctulacrymalia, removal of tumours from the lids, &c. &c. have been frequently practised.

Diseases of the eyes present a fine field for the exertions of a Medical Missionary. He is able to afford so much relief, and the benefit is so plain and self-evident, when a man almost blind has been restored to sight, that this forms a very important branch of treatment in hospitals and dispensaries for the benefit of the Chinese.

Though the amount of relief afforded in the treatment of general medical and surgical cases is very great, yet I think our influence

is more felt, in the treatment of eye disease, in which the native surgeons can do very little, and what they do is generally injurious, so far as I have seen; whereas by our European modes of treatment, many diseases of this organ that are very painful, and if unchecked would result in blindness, are almost or altogether removed.

The great and sudden changes of the climate, or of the weather in all parts of China, and especially in this Northern region, certainly cause much inflammation of the eye. Cattarrhal ophthalmia is at such times very common, and occasionally I have seen it, as at Shanghae, a very prevalent epidemic, when large numbers of persons came to the hospital, suffering from this violent malady. But on the whole, there is probably, as much eye disease in England, as there is in China, that is, in comparison to the population. The difference consists in this, that in England, such cases are at once attended to, and generally relieved,—whereas in China, little or no relief being obtainable, the mass of the cases do not get well, and blemishes more or less severe remain as it were stamped on the eye. In this way there is a great amount of ophthalmic injury to be noticed in a large city. It must also be borne in mind, that Small-pox is always present in Chinese cities, and this alone destroys the eyes of great numbers of children; indeed the havoc made by it in this respect is astonishing. Sometimes in one day, several children have been seen in the surgery, with total loss of sight. On asking the parent when his child lost its sight, the answer would very often be, “when it was 4, 5 or 6 years old, it had small-pox,” or, as is commonly said,—“the heavenly flowers came out;” or, “since the appearance of these heavenly flowers, the child has been blind.” The word small-pox is seldom used, being supposed to be disrespectful to the imaginary goddess of small-pox.

Many children thus lose their eye-sight, and still larger numbers have one or both eyes damaged to some extent,—a distressing circumstance from which vaccination has largely delivered Western nations. We can hardly realize to its full extent, the blessing that Dr. Jenner conferred on the human race in this particular alone. For, by his recognition and publication of the salutary influence of vaccination, we are enabled to ward off or modify this fearful scourge.

Many blind persons here are exposed to abject poverty. Some become beggars; those who have been able to obtain a little education become fortune-tellers, and finders of lucky days, also musicians and story-tellers, two or three of them associating together for this purpose, and resorting to the tea-halls, to sing and recite by turns for the pleasure of the company, or to tell the famous stories of the warriors and generals of ancient Chinese history, for the instruction of their hearers.

It may not be inappropriate in this Report to make a few remarks on the Situation and general characteristics of Peking.

THE SITUATION OF PEKING.

Latitude $39^{\circ} 52' 16''$ N.; Longitude $116^{\circ} 28' 54''$ E.

There are two cities, the North or Tartar city, inclosing the Imperial city with its palace and parks in the centre, and the South or Chinese city, which is a walled suburb, in fact, where the chief part of the commercial business is carried on; it is also called the old city, because it is built on the site of the old city Yen-king.

The Manchoos are supposed to live in the North city, and the Chinese in the South city, but the Chinese have acquired much land and many houses by purchase from the Manchoos. The Tartar city is from North to South $3\frac{2}{3}$ miles, from East to West $4\frac{1}{3}$ miles, the circuit of its walls is $14\frac{1}{2}$ miles. The South wall of the Tartar city is the North wall of the Chinese city, which projects beyond the Tartar city $\frac{1}{4}$ of a mile, both on the East and the West. Its dimensions from North to South are $2\frac{1}{4}$ miles, and from East to West 5 miles. The circuit of the Chinese city exclusive of the South wall of the Tartar city is 10 miles, while the circuit of the outside walls of both cities is about 20 miles. The supposed population of both cities is 1,500,000.

This Metropolitan city of the Empire of China is situated in the midst of a sandy plain, having hills on the North side distant from 25 to 30 miles. These form part of the rocky ridge stretch-

ing range after range, between China and Tartary, and on the West side also there are hills distant from 10 to 15 miles,—the spurs of hills running South from the Northern ranges.

From observation of the sinking of some wells that have been seen in the process of making, the surface appears to be generally sand for 5 or 6 feet, then a thick layer of yellow sandy clay for about 20 or 25 feet, and afterwards a few feet of yellow sand resting on a bed of rolled pebbles and gravel. The wells are generally from 30 to 40 feet deep.

The chief part of the plain is capable of cultivation, and yields abundant crops. These consist chiefly of wheat and barley, followed by the white and red varieties of the creeping yam (the red variety is the sweet potatoe). These kinds of millet are used largely by the people instead of rice, the great millet or Sarghum called here kaou-lëang is also used, for the making of ardent spirits by distillation. Beans are grown between the rows of the millet, maize and buck wheat are also grown; cabbages are cultivated to a very great extent, and are stored in deep covered pits for winter use. Melons of various kinds, cucumbers, carrots, turnips, radishes, egg-plants, onions of all kinds, celery, and parsley, capsicums or cayenne pepper, tomatoes, long and broad beans, spinach, tobacco and cotton are all cultivated in the fields and kitchen gardens. Asparagus of very good quality, but small in size, grows largely in the park-like inclosures of the Tëen-tan or altar of heaven, and of the Shin-nung-tan or altar of the genius of agriculture.

The irrigation of the kitchen gardens and vegetable fields is effected by means of wells. The water is raised in baskets by human labour chiefly; but in some places, chain pumps driven by mules are employed, and the water is led about in channels where it is wanted. The possession of an abundant well of good water is a valuable acquisition, the water of many wells being brackish. All the water of the plain leaves a large deposit of lime in the kettles.

The fruits of the districts are apples, pears of various kinds (one round and yellow is of excellent quality), plums, apricots, grapes, all abundant and good; cherries rather poor, peaches moderate, persimmons, hazel-nuts, walnuts, and chesnuts. The Chinese use largely the fruit of the Sisyphus or jujube tree, commonly but improperly called dates by Europeans, when they are boiled in honey;

also the seeds of the *Nelumbium* or water-lily, and the salted seeds of the water melon. Oranges and lemons are grown to some extent but are not of good quality. Very good potatoes come from Mongolia and Manchuria, where they are extensively grown.

The red fruit of the large-leaved hawthorn is gathered in large quantities on the hills, and is a very pleasant sub-acid fruit, especially when cooked.

Some parts of the plain are mere sandy wastes, but there is water some feet below the surface. Attempts are made to cultivate these sandy tracts, but the harvest is not very productive. Large quantities of willows are grown there, which are chiefly used for burning into charcoal for the supply of the city. Looking over the city from the walls or from the observatory, it is remarkable to notice the great amount of trees that screen the houses. The tree principally cultivated in the city is the *Wei-hwa* or *Siphora*, whose flowers are used for making a yellow dye. It is a handsome tree with a straight trunk, and a fine head of foliage. Almost every house-holder has one or two such trees in his courtyards. Many are grown in the streets, and there are avenues of them in some of the best streets; the palace gardens are also full of them. In the park round the altar of heaven, there are noble avenues of these trees exceedingly well grown, which are very handsome.

Among the trees of this district may be mentioned besides the *Siphora* and willow, the elm, the poplar, a species of ash, the oak, the hibiscus, the maple, the mulberry, and the *Liliac* both purple and white.

Several varieties of Pine are cultivated. The splendid white bark pine tree grows here to perfection, and is much used for planting round graves and in the courts of temples. It is the handsomest tree in the region. Its white trunk and branches, and head of dark green foliage, make it a very noticeable object. The trunk is as white as if it had been carefully whitewashed. In the cemetery of the Eunuchs there are some fine specimens of this tree,—and in some of the temple courts, there are trees whose trunks are 15 feet in circumference, just before they divide into branches.

Much more flesh meat is eaten by the people here, than is the

case in the central and Southern provinces. Fish is not very common, though considerable quantities of salt water fish are brought from the coast viâ Tëentsin, packed in ice; fresh water fish are reared in pools and lakes, and carried alive to market.

Pork is very largely used. Flocks of sheep are brought down from Mongolia, and mutton is extensively used by the people, great numbers of sheep being killed every day. The butchers here, I may mention, are mostly Mohammedans.

Beef is not much used, but it is in the market. The poor among the population use the flesh of camels, horses, mules and asses very largely, which may at all times be seen carried about the streets in a cooked state by hawkers. These animals are not killed for food, but such as die either from old age or accident are consumed without scruple. The Mongols who come to Peking in the winter season, bring down wild boar, venison, Hwang-yang or antelopes, sheep, hares, partridges and pheasants, all in a frozen state, and in large quantities. They also bring down a considerable amount of ~~leather~~ ^{leather} packed in the cleaned stomachs and intestines of sheep.

Salmon and sturgeon are also brought in a frozen state from the sea coast of Manchuria.

Fowls, ducks and geese are also largely consumed, and in the winter, pheasants and wild duck are commonly to be obtained.

Lime and coal are brought in large quantities from the ranges of the Western hills, the nearest mines being 20 or 25 miles distant, and the furthest that supply Peking from 80 to 100 miles distant. The coal is carried in sacks on the backs of camels, horses, mules and asses; the long strings of camels seen in the cool months of the year carrying the coals are very remarkable. The coal is of various qualities, the kind chiefly used by the Chinese is soft anthracite, because it is smokeless, and can be burned in their stoves without a chimney. Hard anthracite is also very common. There is a bituminous coal used by the blacksmiths and iron founders for their forges, which burns freely, with a good flame, producing a good cinder, and finally leaving only a little brown ash. This is the coal chiefly used in foreign grates and stoves. It is quite as good as the best English or Welsh coal, and can even be used in the gun and despatch boats with perfect success. This

coal comes from the mines on the Pih-hwa-shan, about 80 or 90 miles from the city.

The Chinese use the coal dust and small coal of the anthracite, by wetting it with water, mixing it with yellow clay, and working it into cakes and balls, which when dry, burn freely and give a good red fire.

There is also brought from the coal mines, a kind of black clay, which lies on the coal beds, of which it is the upper layer. It is clay mixed with carbon, and a little bitumen from the coal, and is used by plasterers for mixing with lime to make a black plaster, which resists the weather better than the plaster made of lime alone.

Much slate is found in the Western hills, and the villages at the foot of the hills have in many places all the houses evenly and smoothly roofed with slates. It is a fine blue slate, some of it pale green, and can be split into very thin sheets. Slate is also largely used as a building stone, for steps, for the sides of doors and windows and for flags, but there are many crystals of sulphuret of iron or iron pyrites in it, which rust and stain the surface in patches.

The white marble which is used so largely in the city for Imperial bridges, and for the steps and foundation walls of the palaces of the princes, for the sides and carved balustrades of terraces in temples and palaces, for tablets, stone-lions, and various other objects, comes from extensive quarries to the South-West of the city at Cho-chau near Fung-shan, distant about 50 miles, where there are large excavations. These quarries are the sources of all the marble used at present in Peking, and formerly in the old city of Yen-king, which was on the site of the Southern part of Peking. Much of the carved marble once used in the old city for ornamental work, now forms the foundations for the walls of the present city.

Some time ago, a block of white marble 15 feet long, by 12 feet thick, and 12 feet broad, and computed to weigh 60 tons, was dug in these quarries, and carried along a road 100 miles long constructed for the purpose, to the Eastern tombs of the present reigning dynasty, to be cut into the figure of an elephant for the tomb of the late Emperor Hëen-fung. The block of marble was placed

on two ponderous trucks, made of large beams of timber lashed and clamped together, moving on 16 wheels, and drawn by 600 mules and horses to the place of its destination. It was an extraordinary sight, and almost all the foreign residents went to see it, as it passed near the city to the tombs. Many other blocks of marble were also taken there, but this was said to be the largest that had been cut successfully.

Numerous carts are frequently seen entering the city, bringing blocks of Natron from Chang-këa-kow or Kalgan pass, and the Ku-pi-kow pass, to which places most of it is brought by the Mongols, who collect it in various localities in Mongolia and Thibet. It is brought in very large quantities to Peking, and is used for washing clothes, making bread and especially cakes which it causes to rise well. It is also used by the people as a purgative, on the principle that as it washes or cleanses clothes, so it can cleanse the interior of the body. Much of what comes to Peking is sent to the central and Western provinces, the Southern provinces are supplied by the sea-going junks from Tëen-tsin and Shan-tung. Its composition according to Professor Miller's Chemistry, is Sesqui-carbonate of Soda mixed with Sulphate of Soda and common salt.

The following thermometrical observations have been made in the open air at Peking, from Dec. 1861 to Dec. 1862 inclusive.

| 1861. | Maximum by day. | Minimum by day | Maximum by night | Minimum by night. | Average by day | Average by night. | Rainy days. | |
|-------------------|--------------------|-------------------|---------------------|----------------------|-------------------|----------------------|----------------|--|
| December 1862. | 50 | 24 | 30 | 5 | 41 | 18 | — | } A little snow on two days. |
| January | 45 | 15 | 18 | -6 | 37 | 7 | — | |
| February | 55 | 32 | 32 | — | 42 | 20 | — | } Slight drizzle on two occasions. |
| March | 70 | 38 | 50 | 22 | 50 | 33 | — | |
| April | 81 | 40 | 54 | 28 | 64 | 43 | 2 | |
| May | 95 | 60 | 66 | 44 | 78 | 55 | 5 | |
| June | 100 | 72 | 74 | 58 | 85 | 65 | 12 | |
| July | 98 | 62 | 76 | 60 | 86 | 70 | 12 | |
| August | 91 | 70 | 74 | 62 | 85 | 68 | 12 | |
| September | 85 | 54 | 66 | 46 | 73 | 56 | 9 | |
| October | 68 | 48 | 54 | 32 | 59 | 43 | 7 | } One fall of snow of 3 inches. |
| November | 58 | 26 | 48 | 10 | 41 | 25 | 1 | |
| December | 36 | 20 | 25 | 3 | 28 | 12 | — | } 1 fall of snow 1½ in. & 1 very slight fall. |

As will be seen from the above table, the range of temperature is great,—from 100 degrees above to 6 below zero. For five months in the year hardly any rain fell, and it struck me as remarkable that in March, the heat of the sun increased, and the thermometer rose gradually for the day and the night, the frost ceased, and the ice all melted away; in fact, spring began and vegetation commenced before there was any rain, which did not fall till April, after which, the whole country which before was arid and brown became covered at once with full vegetation and rich green verdure. In the winter, there were some sand storms of great violence. The wind blew strong from the North-west, and brought with it great clouds of sand. The barometer always fell before the wind began to blow, and after the wind had been blowing for some time, the whole atmosphere became filled with sand, obscuring the sun and darkening the daylight considerably. This sand found its way into the houses and covered every thing. The quantity of sand on some occasions was so great, that it lay like snow in the court-yards and other inclosed places. These sand storms were most violent and disagreeable during the winter, but were most frequent during the months of March and April, when they occurred sometimes twice a week. Occasionally the commencement of one of these sand storms could be witnessed from the city-walls, and it was a very extraordinary sight to see two great clouds of sand, rolling as it were over the city, and shrouding all the objects around in its progress, until the whole place was enveloped in a cloud of dust.

The greatest quantity of rain fell in June, July and August, when violent thunderstorms deluged the country, and filled all the water-courses. The wheat harvest is over by the end of May, and these heavy rains enable the farmers to get into the ground, the creeping yam, sweet potatoe, millet and other food plants for the second crop, which under the influence of the rain and tropical heat, soon spring up and grow to maturity.

The amount of snow that falls in the winter at Peking appears to be but small. In December 1861, there were two very slight falls of snow, which was the whole amount that fell during the winter of 1861—62. In November 1862, there was one fall of three inches of snow; and in December, there were two falls of snow, amounting together to little more than 1½ inches.

Though the changes of temperature are great, the heat being

tropical in summer, and the cold excessive in winter, yet from the sandy nature of the plain, and the weather in general being pleasant and dry, there being little rain and much sunshine, with very little fog at any time, the situation may be considered a very healthy one. The chief drawback to the healthiness of the city is its imperfect drainage, and the evil habits of the people, in throwing all the filth and refuse of their houses into the streets. I believe the safety of Chinese cities from desolating pestilence depends mainly on the circumstance, that manure of all kinds has a high market value, and is therefore carefully collected and daily carried out of the city into the rural districts, for the enriching of the fields and kitchen gardens.

The attention of the founders of Peking and of the Emperors of China, from the days of Kublai Khan, who built this city in 1280, to the time of Këen-lung, who died in 1795—6, seems to have been much occupied with the water supply of the place, and a very elaborate system of water-courses pervaded the city. But owing to neglect on the part of the government from its poverty, since the time of that magnificent Sovereign, Këen-lung, whose son ruined the resources of the Empire by lax government and dissipation, (though Këen-lung is also accused of spending money too lavishly on his decorative and ornamental works,)—the water channels and embankments have never been repaired, when injured or broken down by time and occasional inundations; and thus the water which was once carefully stored in large tanks and reservoirs, and thence distributed all over the city and surrounding country, has been allowed to run off and be wasted.

The chief stream that flows through Peking comes from the Kwän-ming-hoo, the lake near Yuen-ming-yuen, and enters the city moat at the North-east angle of the city. The water is there confined by an embankment, so as to form a large tank, the surplus water flows along the moat on the North and East sides of the city, till it falls into the canal that leads to T'ung-chow, which begins at the South-east corner of the Tartar city. In the moat, there are 2 or 3 weirs to dam up the water, as there is a fall of several feet from North to South. There are also five large weirs or dams in the T'ung-chow canal, each about 10 feet high, the fall of the country from Peking to T'ung-chow being 50 feet. It is by this

canal that the Imperial tribute grain is brought to the capital; it is in fact, the end of the grand canal. The grain is transhipped and carried over portages at all these dams. It is chiefly millet, very little rice is now sent to Peking from the provinces.

A small stream on the west side of the Chinese city rises in a patch of marshy ground, a short distance from the city, and runs into the moat. It is increased in size by many surface springs in the moat itself, and flows along the South and East Sides of the Chinese city, finally also joining the T'ung-chow canal. These two streams form the whole water supply of that channel. The only other stream in the neighbourhood is one between the city and the Imperial hunting ground or Hae-tsze, on the south of the Chinese city. This rises in a marshy pool some distance to the South-west, runs past the Hae-tsze, and falls into the Pei-ho at Chang-këa-wan.

In the winter season, flood-gates are opened at the North-west corner of the Tartar city, to allow the water to fill the moat on its West and South sides, so that ice may be formed in that part of it, which lies on the South side of the Tartar city, but within the Chinese city. The ice is dug out in large blocks from 12 to 18 inches thick, and stored regularly in large deep pits dug for the purpose, which when full are banked over with mats and earth. Ice is thus kept all through the summer and autumn for the preservation of fish, flesh meat, fruit and other purposes. It is sold at a very low price, and is largely used by the inhabitants, who keep a block of it in their sitting rooms to reduce the temperature.

Part of the water accumulated in the tank to the North passes into the city, and fills some large water-lily or Nelumbium lakes or pools, thence it passes into the lakes at the side of the palace. In former times, sufficient water flowed into the city to fill these lakes, and also to fill the several water-courses, that pass through the city to the South, but the water supply is no longer adequate for this purpose, owing to the feeding channels from the tank not being kept free from rubbish, so that the water runs away from the tank down to the canal. The whole system of the water-courses is in ruins, or they have been allowed to become choked up with earth and stones, and are no longer in use.

The system of drains was also at one time very effective, large

stone drains exist in all the main streets. They were flushed and scoured out by the water of the water-courses, and thus the city was tolerably well drained. But these drains are broken and blocked up, and after heavy rain, they overflow and deluge the streets with sewage water, which collects in hollow parts of the streets and forms ponds of putrid mud;—the sun dries these, and the dust that is then blown about by the wind in the face of the passer by is most offensive, both to taste and smell.

The inhabitants are supplied with water by means of wells. Many houses have wells in the court-yards, but in some situations, the water is brackish and cannot be used for drinking; the common people are supplied from wells in the streets. Certain wells have a reputation for very good sweet water, and yield a constant supply both in winter and summer, and thus give a good income to the proprietors. Men are employed to draw the water, and sell it to the water carriers, who carry it in tubs on wheel-barrows or on mule carts, according to the distance it has to be carried to their customers.

Some of the wells in the Southern part of the Chinese city, especially those in the park of the altar of heaven, have a high character for pureness, and the water is carried from them to great distances.

In conclusion, it may be stated, that the object of the Hospital is two-fold,—one is directly to benefit the people by healing their diseases, as a branch of Missionary work in this heathen land, and thus endeavouring to win their confidence by showing them that it is intended to do them good;—the other is to use the influence thus obtained, as a means of directing their attention to Jesus Christ, the Son of God, and Saviour of the world.

The way in which the first object is carried out, has been shown in the report now presented, and some attempt has been made to carry out the second. Since the opening of the hospital, various Christian tracts in the form of broad sheets, the Ten commandments, the Lord's prayer, and short summaries of the Gospel, calendars of the sabbaths, &c. &c. have been pasted on the walls of the waiting rooms, passages and surgery. Copies of the Scriptures and Christian tracts have been given to the patients, and sent by them to their friends on their return home, often in distant parts

of this and other provinces. Of late also religious services have been held in the hall of the hospital, and the patients while waiting there, have appeared to be much interested in hearing the Gospels read, and they discuss the statements therein made in regard to the Mission of Christ, and Man's salvation through Him. When patients have asked what was the purpose of the hospital, it has been told them, that those who believe in the religion of Christ are enjoined to benefit their fellow-men, as they have opportunity,—and that as He went about everywhere doing good, healing the sick and teaching the people, so his disciples in humble imitation of His example, endeavour to heal the sick and spread abroad the truths of His holy religion, which ascribes Glory to God in the highest, and preaches peace on earth and good will to men.

May the Divine blessing rest on this and all other efforts to promote the benefit and welfare of the Chinese people, and may they be thereby led to know and believe in Him, who is the Life of the World. Should this be the result in any case of the labours connected with the hospital in Peking, to God be all the praise.

DR. W. LOCKHART IN ACCOUNT CURRENT WITH THE LONDON MISS. SOCY'S CHINESE HOSPITAL, PEKING, CR.
FROM OCTOBER 1ST 1861, TO DECEMBER 31ST 1862.

| | | Tael. Cts. | | Tael. Cts. |
|----------------|---|------------|----|--|
| 1861. | | | | |
| May | Donations from W. S. Brown, Esqr. formerly of Shanghai, | 600 | " | Instruments, Medicines, &c. &c. in London, 800 |
| " | " in England, | 52 | " | Splints and Hospital articles in London, 74 |
| " | " Col. Shadwell, 3 years, | 20 | " | Repairs, alterations, making Wards, Stoves, &c. 454 |
| " | " Miss Webb, Liverpool, | 2 | " | Papering wards, Surgery and waiting rooms, 54 |
| October | " Admiral Sir James Hope, K. C. B. | 175 | " | 1862. |
| " | " Edward Webb, Esqr. Shanghai, | 500 | " | January |
| 1862. | | | | to |
| March | " W. S. Brown, Esqr. | 300 | " | Medicines in London, 80 |
| " | " Revd. W. Beach, | 14 | " | Medicines bought here, 171 |
| August | " T. F. Wade, Esqr. | 14 | " | Sundries, coals, brushes, baskets, jars, bowls, &c. 73 |
| " | " Col. Shadwell, | 6 | " | Wages for Servants and Surgery attendants, 272 |
| November | " H. E. the Hon. F. A. Bruce, H. M. Minister Plenipotentiary, | 200 | " | Food for poor Patients, 47 |
| December 31st. | Balance due to the Hospital, for the year's expences. | 124 | 65 | Dec. 31st. Rent for 14 months, 350 |
| | Total, | £2,007 | 65 | Total, |

DONATIONS FOR 1863.

| | |
|--------------------|-------|
| W. S. Brown, Esqr. | £ 600 |
| Edward Webb, Esqr. | 500 |
| From a friend, | 3 50 |

December 31st, 1862.

W. LOCKHART,
PEKING.

